

Fall Assessments Highlight Good Survival of Stocked Lake Sturgeon in the Red River (MN) Basin

By: Doug Aloisi

Fall is harvest time, even for fish! Fish growth is regulated by water temperature, and slows to a crawl overwinter, consequently warm water ponds are emptied at the Genoa National Fish Hatchery (WI) to begin fall fish deliveries. Many fish of various species are delivered in the fall to various federal, tribal



Randy Zortman, Curtis Uran and Jerald Roberts from the White Earth DNR

and state conservation partners to meet fisheries management plans. Lake sturgeon are also distributed at this time, and this year was a productive year at Genoa, with over 47,000 fall fingerling lake sturgeon being produced and released to 3 tribes and 3 state conservation agencies in the 2009 production year. One ma-

About Genoa NFH

Genoa NFH was established over 75 years ago and is one of 69 **Federal Fish Hatcheries** located across the Nation. Genoa cultures a variety of cold, cool, and warm water fish as well as freshwater mussels and one salamander species. The hatchery is open for tours during business hours. For large groups, please call for an appointment. You can reach the hatchery at 608-689-2605 from 7:30 am to 3:30 pm.



jor focus area in Genoa's lake sturgeon restoration program is the Red River

basin of central Minnesota. Lake sturgeon restoration efforts were begun on the White Earth Reservation in 2001, with fish being supplied to Minnesota Department of Natural Resources since 2005, and Red Lake Reservation in 2006. Restoration stockings are planned annually for at least 10 years to ensure that both population demographics and genetic diversity are high enough to ensure a high percentage of success. This year many Lake Sturgeon have since began reported being caught and returned to the water by recreational anglers, in commercial fishing gear, and by federal and tribal biologists doing scheduled fisheries assessments. Over the past few years, fish passage has been provided



Curtis Uran works gillnet during lake sturgeon survey

through cooperative efforts between federal. state and tribal partners which opened up new habitat to sturgeon within the basin. Through the recent efforts to provide fish passage at the Heiberg dam alone, sturgeon now have 120 more stream miles to use as available habitat during different seasons and through different

life stages. This cooperative effort to restore this culturally significant species to the Red River is a long term effort, because it will take a female lake sturgeon up to 24 years just to reach maturity, when it will have its first chance to reproduce. Through the participative efforts of many different agencies and interest groups, it is hoped to see this culturally significant species make a strong comeback to the Red River Basin.

Genoa National Fish Hatchery

mission is to recover. restore, maintain and enhance fish and aquatic resources on a basin-wide and national level by producing over 35 aquatic species of varying life stages, participating in active conservation efforts with our partners, and becoming a positive force in the community by educating future generations on the benefits of conservation stewardship



Pond Draining at Genoa Floods Midwest with Fishing Opportunity By: Nick Starzl

The crew of the Genoa National Fish Hatchery (NFH) with the assistance of several volunteers from local schools wrapped up the 2009 pond production season with a great fall harvest! Walleye, yellow perch, black crappie, channel catfish, largemouth bass, smallmouth bass, and bluegill are the main species cultured and harvested from the ponds at the hatchery. All of these fish are annually produced in order to fulfill fisheries requests throughout the region, as well as serve as vital host fish for ongoing native mussel restoration. Fall fingerlings, which range in size from 3"-6" depending on species, are often in high demand by fish management biologists due to their increased survivability in the wild. Other management objectives include enhancing recreational fishing opportunities, research, tribal trust programs, and for the biological control of nonnative carp. Overall, 26,532 fall fingerling walleye, 70,648 yellow perch, 131,000 black crappie, 1,118 channel catfish, 4,179,450 fathead min-



Hatchery Manager, Doug Aloisi and Fish Biologist Nick Starzl crowd up fathead minnows that will be used as forage for the hatchery's brood stock that will be over wintered in one of the hatchery ponds.

nows, 33,538 largemouth bass, and 10,835 smallmouth bass were harvested this fall. The majority of the fish



Aerial view of Genoa NFH shows the rearing space provided by the hatchery ponds.

were distributed to state, tribal, and National Wildlife Refuge waters in the Midwest Region, while some were retained on station until next spring in order to be used as host fish for the endangered Higgins Eye pearlymussel program. A grand total of 10,821 lbs were harvested from the hatchery ponds this fall, contributing to fisheries conservation throughout the Region.

Genoa National Fish Hatchery provides newly metamorphosed mussels to the Illinois Natural History Survey. By: Tony Brady

The use of freshwater mussels, as test organisms for toxicity testing, is growing as researchers and the public realizes the vulnerability of these sessile animals to lower concentrations of toxins than fish or aquatic insects historically used for such tests. With only a handful of facilities across the country able to provide mussels for toxicity testing, demand can quickly surpass supply. Genoa National Fish Hatchery has been helping meet the demands for test organisms for the past two years. Most recently in September 2009, Genoa NFH was contacted by the Illinois Natural History Survey about providing some newly metamorphosed mussels, known as



Transformer mussel using its foot to crawl around in search for food

transformers, for the completion of an ongoing series of toxicity tests. The INHS was looking for a mussel species that they could not get from the other facilities they had been using. After discussing options available from Genoa NFH, the INHS requested washboard mussels as the species they would like to test. Having a reproducing population of washboard just south of the hatchery in Prairie du Chien, WI and an abundance of host fish, blue catfish, made meeting the request possible. Hatchery SCUBA divers, part of the Region 3 dive team, spent a few hours in the Mississippi River in Prairie du Chien collecting four gravid females and returned them to the hatchery. Blue catfish were inoculated in mid September and one-half of the fish

were placed in 38 L aquaria supplied with heated ($20\,^{\circ}$ C) well water, while the other half was placed in a 38 L aquaria supplied with $10\,^{\circ}$ C well water for one week delaying their transformation time in order to meet the request of two batches of mussels shipped a week apart. The first batch of mussels dropped off the fish and was shipped on 14 October with the second shipment going out exactly one week later on 21 October. Correspondence with INHS indicated that the mussels arrived in great condition and that they did well for their test. Genoa NFH is currently in the practice of retaining gravid mussels through the fall and winter, with a supply of potential host fish available in case any such transformer request is made during the winter months when other facilities may not be able to meet these demands.

Butterfly Garden Gets Boost from Badgerland Girl Scouts

In October, Junior Girl Scout Troop 4069 of the Badgerland Council traveled to the Genoa (WI) National Fish Hatchery as part of their Agent of Change Leadership Journey. The Girl Scout Leadership Experience aims to engage girls in discovering self, connecting with others, and taking action to make the world a better place. What better place to start than Genoa?

Scouts visited with biologist Jenny Bailey about how the U.S. Fish & Wildlife Service helps make the world a better place by conserving sport and recreational fisheries and recovering threatened and endangered fish and mussel populations. Scouts learned about ways that they can help with wildlife conservation by volunteering to help create habitat for wildlife, and by

learning about careers in conservation.

After a tour of the programs and facilities, and a delicious pot luck lunch, Scouts went outside for a conservation experience working in the Children's Butterfly Garden. After weeding and mulching, Scouts planted Big Bluestem prairie grass to provide habitat, food, and a windbreak for pollinators, Showy Goldenrod for pollinating opportunities, and Joe Pye Weed for nectar production. This boosted the Garden's habitat quality and volume, and helped make the world be a better place for people and pollinators.



Genoa's Butterfly Garden

Genoa partners with LaCrosse Area Fisheries Offices to Supplement Captive Largemouth Bass Stocks. By: James Luoma

For many years the Genoa National Fish Hatchery (NFH) has maintained captive populations of several warm and coolwater fish in order to provide quality, certified pathogen free fish to its state, federal and tribal partners. With emerging fish diseases such as spring viremia of carp (SVC) and viral hemorrhagic septicemia (VHS), captive broodstock populations are becoming vital to assure that cultured fish are not infected with disease causing pathogens from the wild fish.

Many challenges are encountered when hatcheries need to maintain warm and coolwater broodstock including the ability to hold enough genetically diverse fish and to find a source of replacement broodstock.



LaCrosse FWCO employee Dave Wedan operating the electrofishing boat to collect largemouth bass broodstock for the Genoa National Fish Hatchery.

The Genoa National Fish Hatchery recently consulted with Wisconsin Department of Natural Resource fishery biologist Dave Vertrano to find a fairly isolated bass population that had ample numbers of fish to reduce collection impacts. Dave recommended the flood control lakes in the Viroqua area. Genoa then partnered with two other local USFWS offices to obtain replacement/ supplemental largemouth bass broodstock for its captive population. In September, the USFWS' LaCrosse Fish and Wildlife Conservation Office (FWCO) along with staff from the Genoa NFH electrofished a sample of the wild largemouth bass in Runge Hollow Lake, which is located in southwestern Wisconsin near Viroqua. These fish were then sampled and analyzed for disease causing or-

ganisms including the pathogens that cause SVC, VHS, and a host of other diseases. The disease inspection work was conducted by the fish pathologists at the USFWS' LaCrosse Fish Health Center (FHC).

In mid October, the results from the inspection were in and the largemouth bass population in Runge Hollow Lake received a clean bill of health. It was therefore determined to be a suitable source to obtain broodfish. The LaCrosse FWCO again mobilized with the Genoa NFH staff to electrofish, collect and transport 131 6-8 inch largemouth bass to the Genoa NFH. These fish were incorporated into the existing broodstock population at the hatchery and will be used for fingerling production beginning in 2010.

Finding a disease free source of wild fish is difficult, time consuming and it requires the partnership of several offices to accomplish. The efforts of the three local USFWS offices will allow for higher production of more robust and genetically diverse largemouth bass. This will allow hatchery partners to better fulfill their fishery management objectives, while ensuring Genoa has an ample supply of healthy host fish to further native mussel restoration in the upper Mississippi River basin.

Upcoming calendar of events

December 2009

Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	2	3	4	5
6	7 70th Midwence, Sprin		9 Vildlife Confer	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25 Merry Christmas	26
27	28	29	30	31		